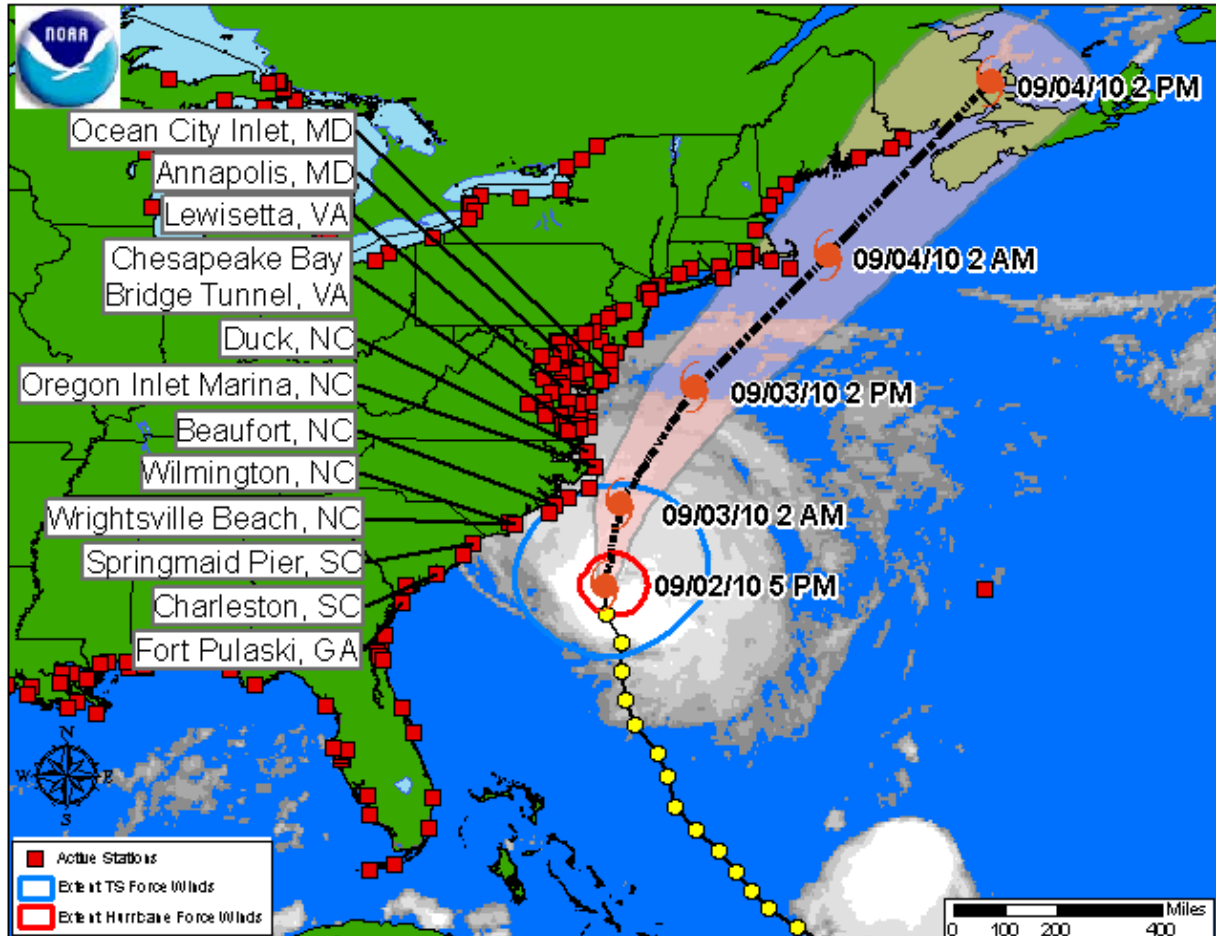




Hurricane EARL QuickLook
Posted: 18:30 EDT 09/02/2010

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 09/02/2010 18:30 EDT, water levels along the eastern U.S. Coastline from Georgia to North Carolina are rising and range generally between 0.3 to 1.0 feet above predicted levels. Water levels in Virginia, and Maryland are at slightly above predicted levels. Winds are increasing across the area and have a range of 8 to 22 knots, with gusts upto 26 knots. Barometric pressure is falling across the region from Virginia to South. It is almost steady in Maryland.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

FORT PULASKI, GA Next predicted high tides are 6.35 ft (1.93 m) at 09/03/2010 03:27 EDT and 7.68 ft (2.34 m) at 09/03/2010 16:04 EDT.

CHARLESTON, SC Next predicted high tides are 4.78 ft (1.46 m) at 09/03/2010 03:10 14:48 EDT and 5.96 ft (1.82 m) at 09/03/2010 15:54 EDT.

SPRINGMAID PIER, SC Next predicted high tides are 4.55 ft (1.39 m) at 09/03/2010 02:53 EDT and 5.72 ft (1.74 m) at 09/03/2010 15:23 EDT.

WRIGHTSVILLE BEACH, NC Next predicted high tides are 3.45 ft (1.05 m) at 09/03/2010 02:35 EDT and 4.49 ft (1.37 m) at 09/03/2010 15:17 EDT.

WILMINGTON, NC Next predicted high tides are 4.49 ft (1.37 m) at 09/02/2010 16:11 EDT and 4.59 ft (1.40 m) at 09/03/2010 17:31 EDT.

BEAUFORT, NC Next predicted high tides are 2.80 ft (0.85 m) at 09/03/2010 03:06 EDT and 3.58 ft (1.09 m) at 09/03/2010 15:57 EDT.

OREGON INLET MARINA, NC Next predicted high tides are 1.08 ft (0.33 m) at 09/03/2010 03:13 EDT and 1.35 ft (0.33 m) at 09/03/2010 15:59 EDT.

DUCK, NC Next predicted high tides are 2.84 ft (0.86 m) at 09/03/2010 02:43 EDT and 3.82 ft (1.16 m) at 09/03/2010 15:22 EDT.

CHESAPEAKE BAY BRIDGE TUNNEL, VA Next predicted high tides are 2.31 ft (0.70 m) at 09/03/2010 03:29 EDT and 2.98 ft (0.91 m) at 09/03/2010 16:11 EDT.

LEWISSETTA, VA Next predicted high tides are 1.60 ft (0.49 m) at 09/02/2010 20:44 EDT and 1.44 ft (0.44 m) at 09/03/2010 08:54 EDT.

ANNAPOLIS, MD Next predicted high tides are 1.69 ft (0.52 m) at 09/03/2010 01:12 EDT and 1.15 ft (0.35 m) at 09/03/2010 12:16 EDT.

OCEAN CITY INLET, MD Next predicted high tides are 1.82 ft (0.55 m) at 09/03/2010 03:16 EDT and 2.41 ft (0.73 m) at 09/03/2010 16:24 EDT.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) homepage.

Analyst:KG

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE EARL ADVISORY NUMBER 34

500 PM EDT THU SEP 02 2010

**...LARGE HURRICANE EARL MOVING NORTHWARD...RAINBANDS AND GUSTY WINDS
ALREADY APPROACHING THE OUTER BANKS...**

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY...

NONE.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

A HURRICANE WARNING IS IN EFFECT FOR...

- * BOGUE INLET NORTH CAROLINA NORTHEASTWARD TO THE NORTH CAROLINA/VIRGINIA BORDER INCLUDING THE PAMLICO AND ALBEMARLE SOUNDS.**
- * WESTPORT MASSACHUSETTS EASTWARD AROUND CAPE COD TO HULL INCLUDING MARTHAS VINEYARD AND NANTUCKET ISLAND**

A HURRICANE WATCH IS IN EFFECT FOR...

- * NORTH OF THE NORTH CAROLINA/VIRGINIA BORDER TO CAPE HENLOPEN DELAWARE**
- * NOVA SCOTIA FROM MEDWAY HARBOUR TO DIGBY**

A TROPICAL STORM WARNING IS IN EFFECT FOR...

- * CAPE FEAR TO WEST OF BOGUE INLET NORTH CAROLINA**
- * NORTH OF THE NORTH CAROLINA/VIRGINIA BORDER TO SANDY HOOK NEW JERSEY...INCLUDING DELAWARE BAY SOUTH OF SLAUGHTER BEACH AND THE CHESAPEAKE BAY SOUTH OF NEW POINT COMFORT**
- * THE EASTERN PORTION OF LONG ISLAND NEW YORK FROM FIRE ISLAND INLET TO PORT JEFFERSON HARBOR**
- * NEW HAVEN CONNECTICUT TO WEST OF WESTPORT MASSACHUSETTS... INCLUDING BLOCK ISLAND**

A TROPICAL STORM WATCH IS IN EFFECT FOR...

- * NORTH OF HULL MASSACHUSETTS TO EASTPORT MAINE**
- * THE COAST OF LONG ISLAND WEST OF FIRE ISLAND INLET AND PORT JEFFERSON HARBOR**
- * NOVA SCOTIA FROM ECUM SECUM TO MEDWAY HARBOUR AND FROM DIGBY TO FORT LAWRENCE**
- * NEW BRUNSWICK FROM JUST WEST OF FORT LAWRENCE WESTWARD TO THE U.S./CANADA BORDER**

FOR STORM INFORMATION SPECIFIC TO YOUR AREA IN THE UNITED STATES...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE FORECAST OFFICE. FOR STORM INFORMATION SPECIFIC TO YOUR AREA OUTSIDE THE

UNITED STATES...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 500 PM EDT THE CENTER OF HURRICANE EARL WAS LOCATED NEAR LATITUDE 32.5 NORTH...LONGITUDE 75.2 WEST. EARL IS MOVING TOWARD THE NORTH NEAR 18 MPH BUT A TURN TOWARD THE NORTH-NORTHEAST WITH AN INCREASE IN FORWARD SPEED IS EXPECTED ON FRIDAY. ON THE FORECAST TRACK...THE CENTER OF EARL WILL PASS NEAR THE NORTH CAROLINA OUTER BANKS TONIGHT...AND APPROACH SOUTHEASTERN NEW ENGLAND FRIDAY NIGHT.

MAXIMUM SUSTAINED WINDS HAVE DECREASED TO NEAR 115 MPH...WITH HIGHER GUSTS.

EARL IS NOW A CATEGORY THREE HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE.

ADDITIONAL WEAKENING IS EXPECTED TONIGHT AND FRIDAY...BUT EARL IS EXPECTED TO REMAIN A LARGE AND STRONG HURRICANE AS IT PASSES NEAR THE OUTER BANKS.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 70 MILES FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 205 MILES.

LATEST MINIMUM CENTRAL PRESSURE REPORTED BY AN AIR FORCE RECONNAISSANCE PLANE WAS 947 MB.

HAZARDS AFFECTING LAND

WINDS...TROPICAL-STORM-FORCE WINDS ARE EXPECTED TO REACH THE NORTH CAROLINA COAST WITHIN THE WARNING AREA SOON. EVEN IF THE CENTER OF EARL REMAINS OFFSHORE...HURRICANE FORCE WINDS ARE EXPECTED TO OCCUR IN THE OUTER BANKS BY TONIGHT. TROPICAL-STORM-FORCE WINDS WILL LIKELY REACH THE COAST FROM VIRGINIA NORTHWARD TO MASSACHUSETTS ON FRIDAY.

STORM SURGE...A DANGEROUS STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 3 TO 5 FEET ABOVE GROUND LEVEL WITHIN THE HURRICANE WARNING AREA OVER NORTH CAROLINA AND THE LOWER CHESAPEAKE BAY. STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 2 TO 4 FEET ABOVE GROUND LEVEL WITHIN THE HURRICANE WARNING AREA OVER MASSACHUSETTS. ELSEWHERE WITHIN THE TROPICAL STORM WARNING AREA...STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 1 TO 3 FEET ABOVE GROUND LEVEL. NEAR THE COAST...THE SURGE WILL BE ACCOMPANIED BY LARGE AND DESTRUCTIVE WAVES.

RAINFALL...ACCUMULATIONS OF 2 TO 4 INCHES...WITH ISOLATED MAXIMUM AMOUNTS OF 6 INCHES...ARE EXPECTED OVER PORTIONS OF EASTERN NORTH CAROLINA...THE OUTER BANKS AND OVER SOUTHEAST NEW ENGLAND. ACCUMULATIONS OF 1 TO 2 INCHES ARE POSSIBLE FROM EXTREME SOUTHEAST

VIRGINIA NORTHWARD ALONG THE IMMEDIATE MID-ATLANTIC COAST...AS WELL AS OVER DOWNEAST MAINE.

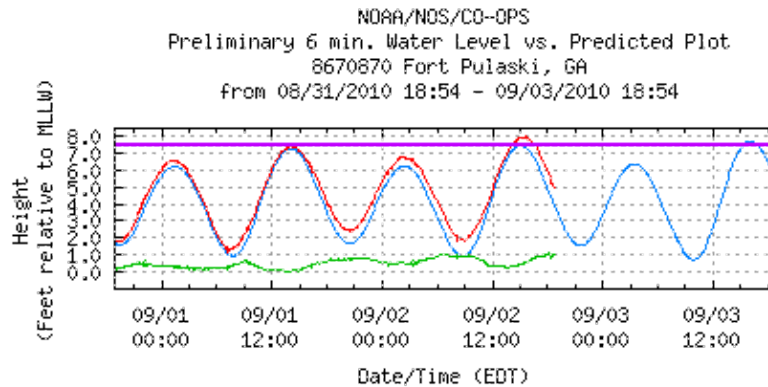
SURF...LARGE SWELLS FROM EARL WILL CONTINUE TO AFFECT THE BAHAMAS AND THE EAST COAST OF THE UNITED STATES THROUGH FRIDAY. THESE SWELLS WILL LIKELY CAUSE DANGEROUS SURF CONDITIONS AND RIP CURRENTS.

FORECASTER AVILA

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Fort Pulaski - Water Level](#), [Fort Pulaski - Winds](#), [Fort Pulaski - Barometric](#), [Fort Pulaski - Air/Water Temp](#), [Charleston - Water Level](#), [Charleston - Winds](#), [Charleston - Barometric](#), [Springmaid Pier - Water Level](#), [Springmaid Pier - Winds](#), [Springmaid Pier - Barometric](#), [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#), [Wrightsville Beach - Barometric](#), [Wrightsville Beach - Air/Water Temp](#), [Wilmington - Water Level](#), [Wilmington - Barometric](#), [Wilmington - Air/Water Temp](#), [Beaufort - Water Level](#), [Beaufort - Winds](#), [Beaufort - Barometric](#), [Beaufort - Air/Water Temp](#), [Oregon Inlet Marina - Water Level](#), [Oregon Inlet Marina - Winds](#), [Oregon Inlet Marina - Barometric](#), [Oregon Inlet Marina - Air/Water Temp](#), [Duck - Water Level](#), [Duck - Winds](#), [Duck - Barometric](#), [Duck - Air/Water Temp](#), [Chesapeake Bay Bridge Tunnel - Water Level](#), [Chesapeake Bay Bridge Tunnel - Winds](#), [Chesapeake Bay Bridge Tunnel - Barometric](#), [Chesapeake Bay Bridge Tunnel - Air/Water Temp](#), [Lewisetta - Water Level](#), [Lewisetta - Winds](#), [Lewisetta - Barometric](#), [Lewisetta - Air/Water Temp](#), [Annapolis - Water Level](#), [Annapolis - Barometric](#), [Annapolis - Air/Water Temp](#), [Ocean City Inlet - Water Level](#), [Ocean City Inlet - Winds](#), [Ocean City Inlet - Barometric](#), [Ocean City Inlet - Air/Water Temp](#).

Fort Pulaski, GA - [Return to List](#)

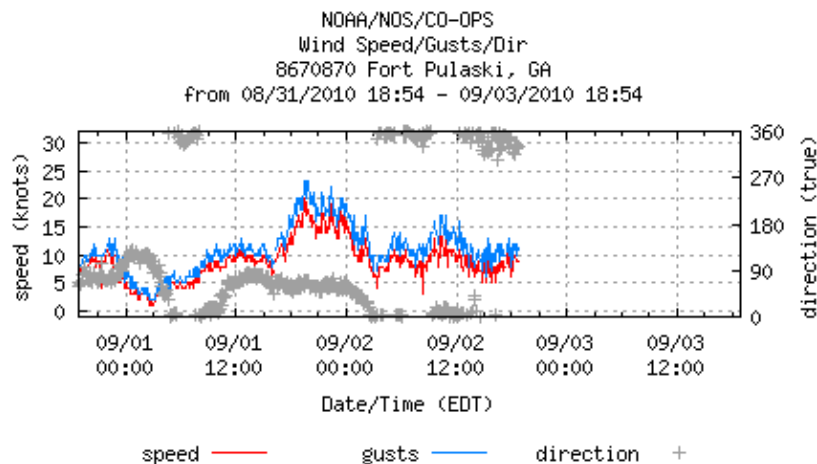


Last Observed Sample: 09/02/2010 18:42 (EDT)

Relative to **MLLW**: **Observed: 4.97 ft. Predicted: 3.96 ft. Residual: 1.01 ft.**

Historical Maximum Water Level: Oct 15 1947, 3.4 ft. above **MHHW**

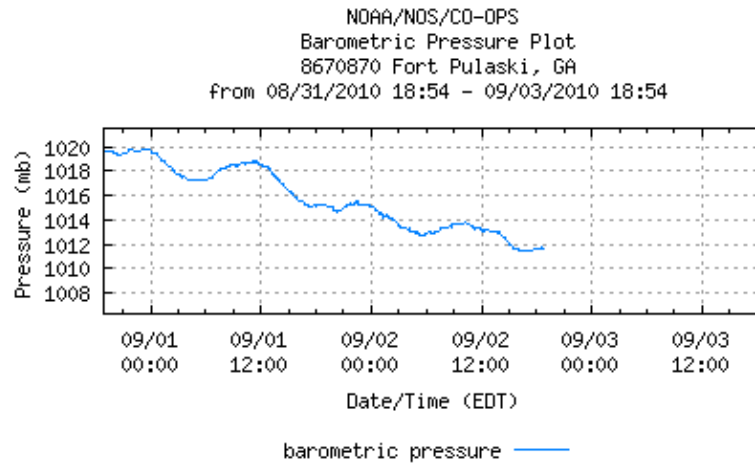
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Wind Speed: 9 knots Gusts: 11 knots Direction: 332° T

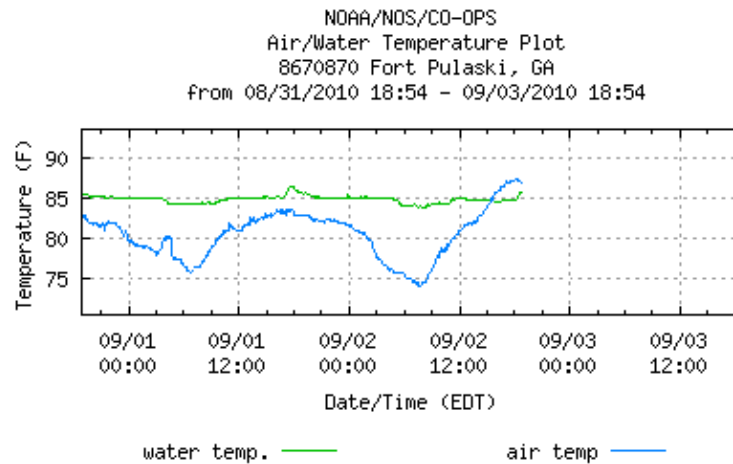
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Barometric Pressure: 1011.7 mb

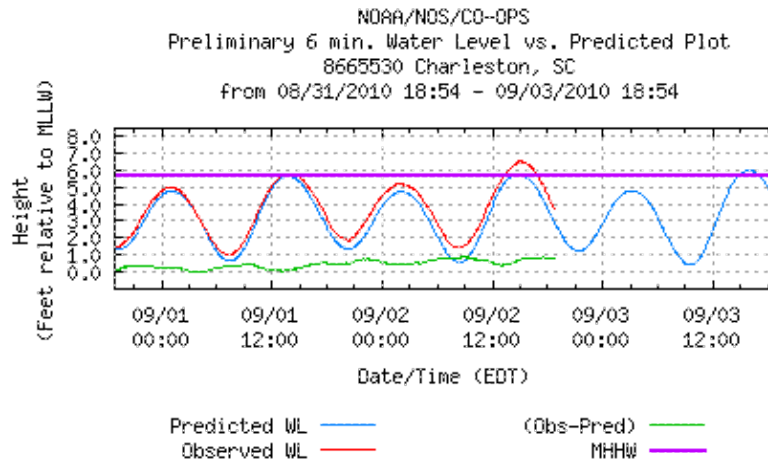
Fort Pulaski, GA - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Water Temperature: 85.8° F Air Temperature: 86.9° F

Charleston, SC - [Return to List](#)

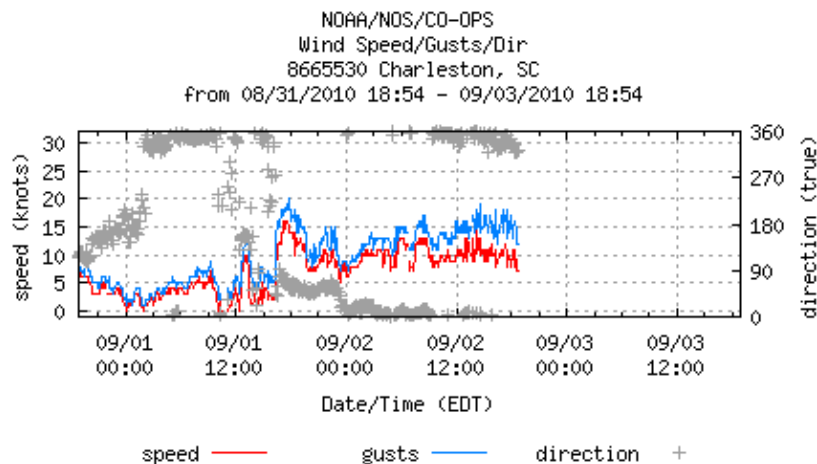


Last Observed Sample: 09/02/2010 18:42 (EDT)

Relative to **MLLW**: **Observed: 3.76 ft.** **Predicted: 2.97 ft.** **Residual: 0.79 ft.**

Historical Maximum Water Level: Sep 21 1989, 6.76 ft. above **MHHW**

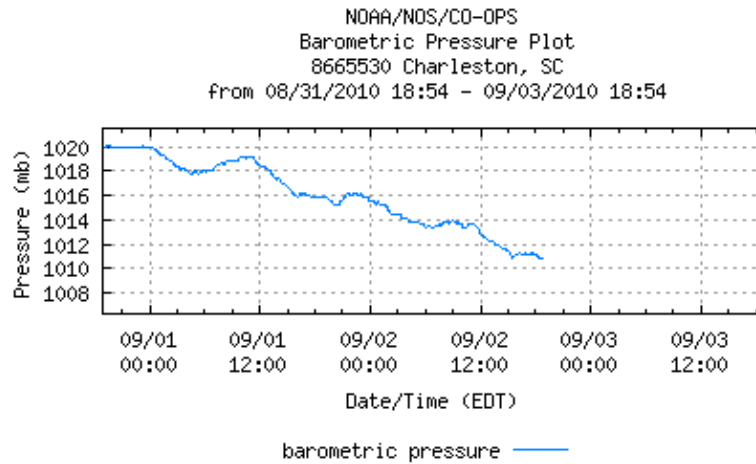
Charleston, SC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Wind Speed: 7 knots **Gusts: 12 knots** Direction: 323° T

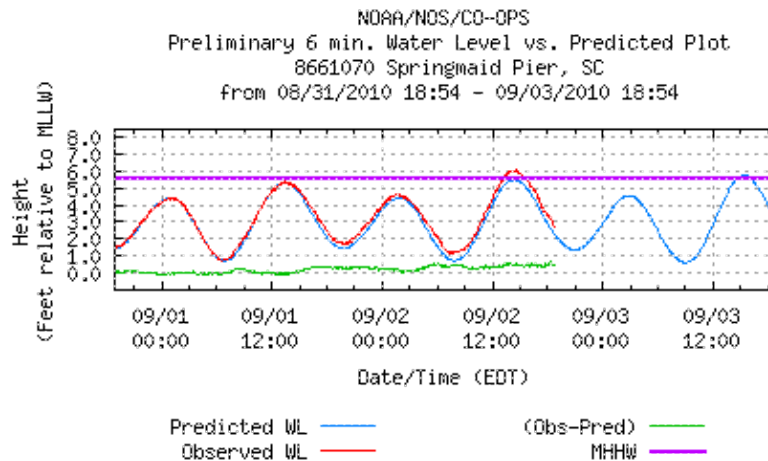
Charleston, SC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Barometric Pressure: 1010.9 mb

Springmaid Pier, SC - [Return to List](#)

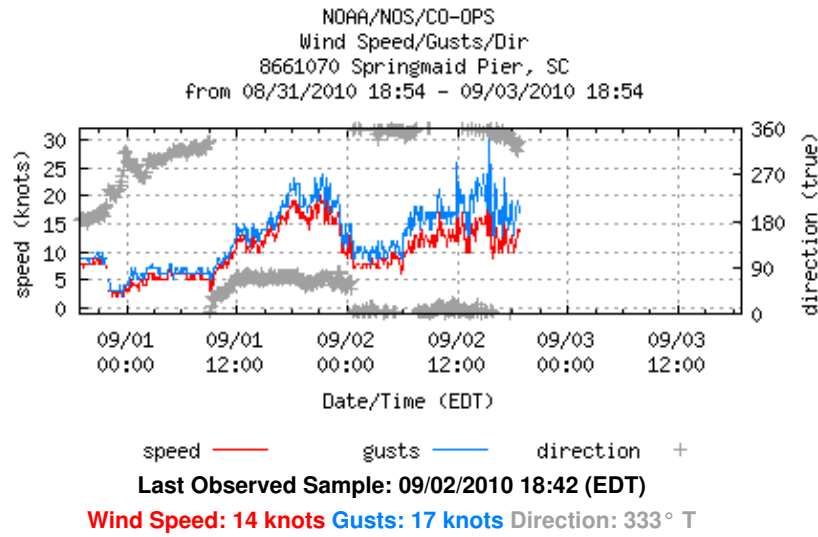


Last Observed Sample: 09/02/2010 18:42 (EDT)

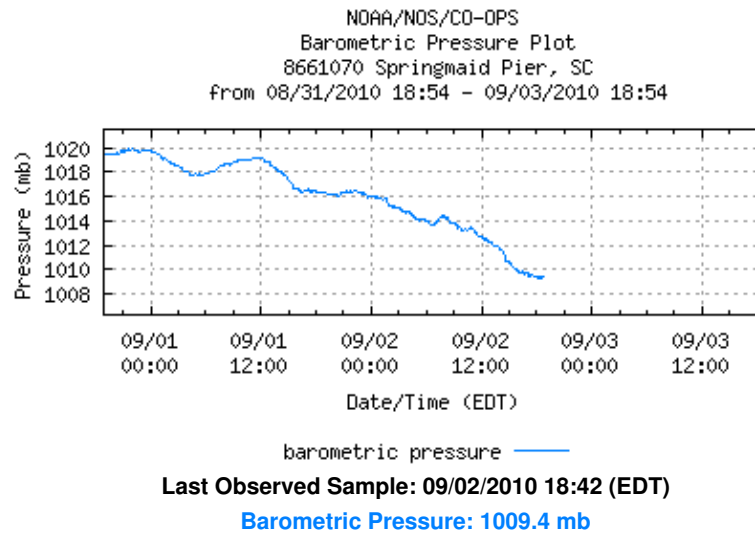
Relative to **MLLW**: **Observed: 2.77 ft.** **Predicted: 2.32 ft.** **Residual: 0.45 ft.**

Historical Maximum Water Level: Jan 1 1987, 3.65 ft. above **MHHW**

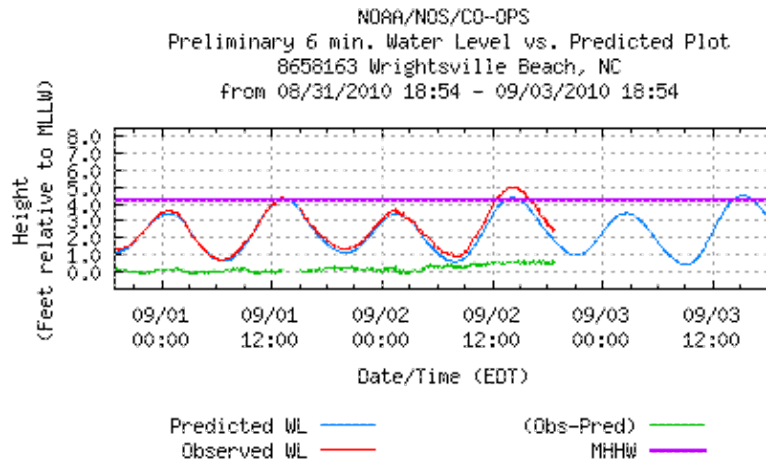
Springmaid Pier, SC - [Return to List](#)



Springmaid Pier, SC - [Return to List](#)



Wrightsville Beach, NC - [Return to List](#)

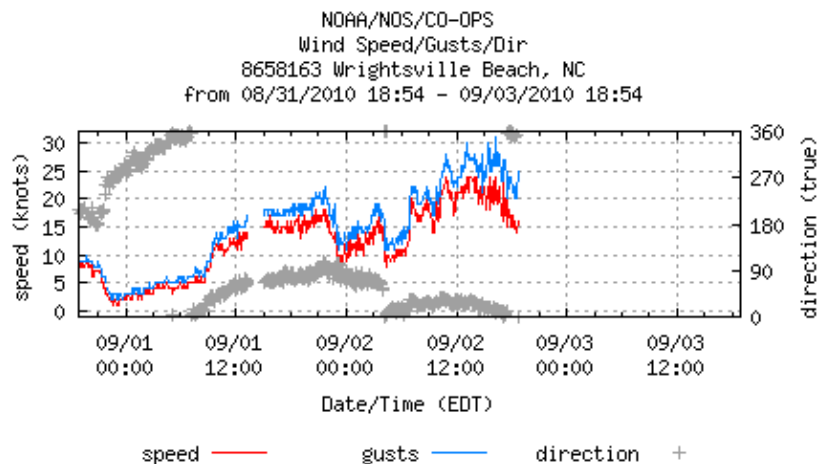


Last Observed Sample: 09/02/2010 18:42 (EDT)

Relative to **MLLW**: **Observed: 2.51 ft.** **Predicted: 1.87 ft.** **Residual: 0.64 ft.**

Historical Maximum Water Level: Sep 25 2008, 2.78 ft. above **MHHW**

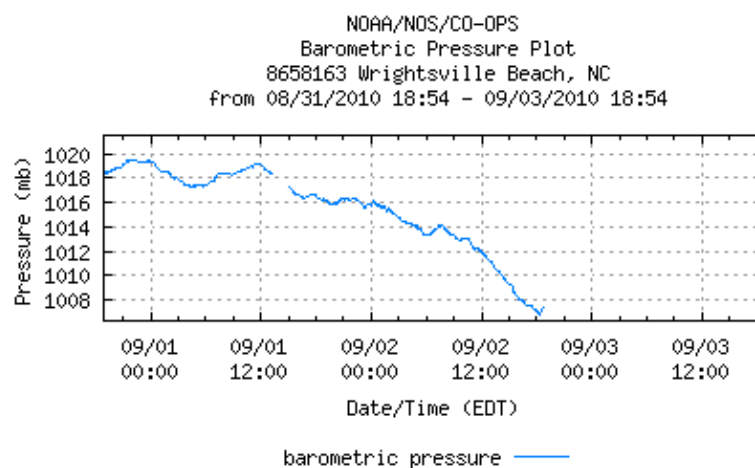
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Wind Speed: 16 knots **Gusts: 25 knots** Direction: 001° T

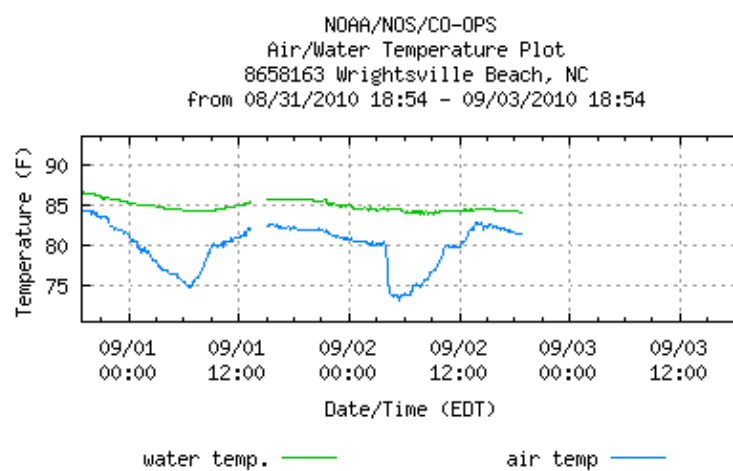
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Barometric Pressure: 1007.4 mb

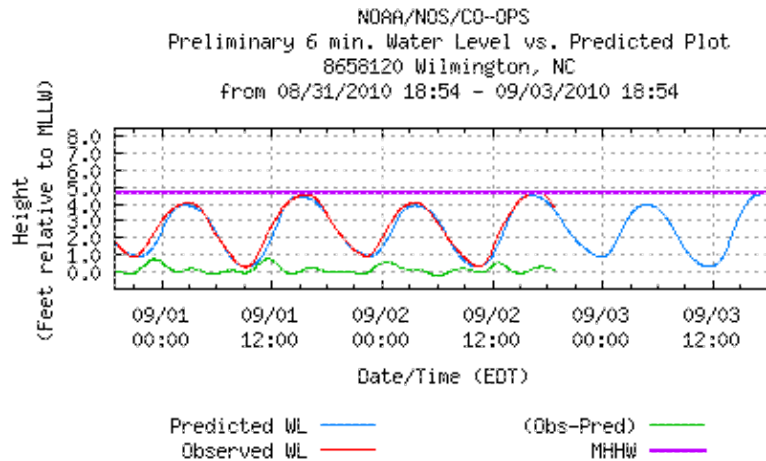
Wrightsville Beach, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Water Temperature: 84.0° F Air Temperature: 81.5° F

Wilmington, NC - [Return to List](#)

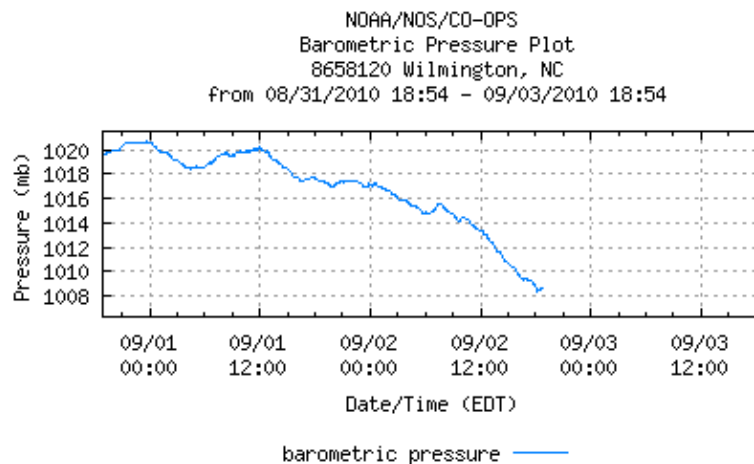


Last Observed Sample: 09/02/2010 18:42 (EDT)

Relative to **MLLW**: **Observed: 3.79 ft. Predicted: 3.65 ft. Residual: 0.14 ft.**

Historical Maximum Water Level: Oct 15 1954, 3.47 ft. above **MHHW**

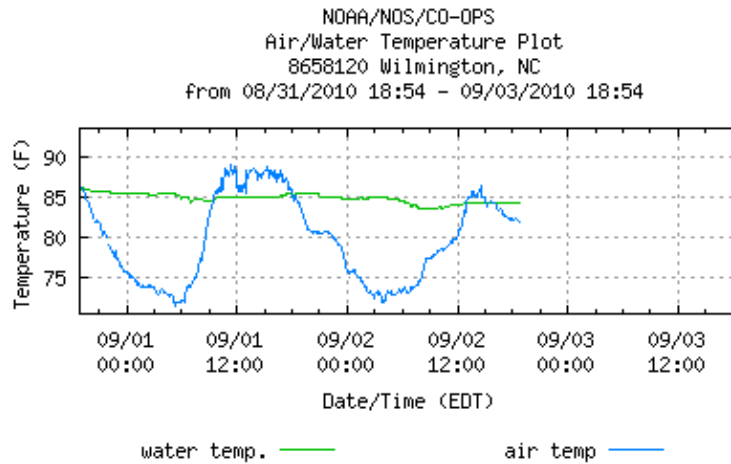
Wilmington, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Barometric Pressure: 1008.6 mb

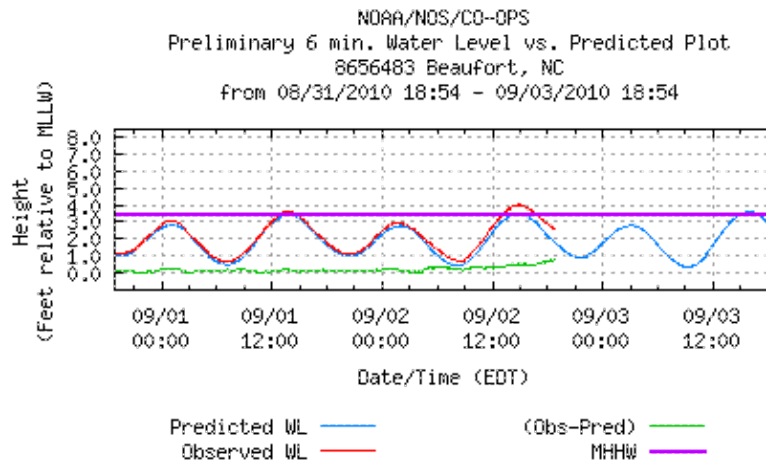
Wilmington, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Water Temperature: 84.2° F Air Temperature: 82.0° F

Beaufort, NC - [Return to List](#)

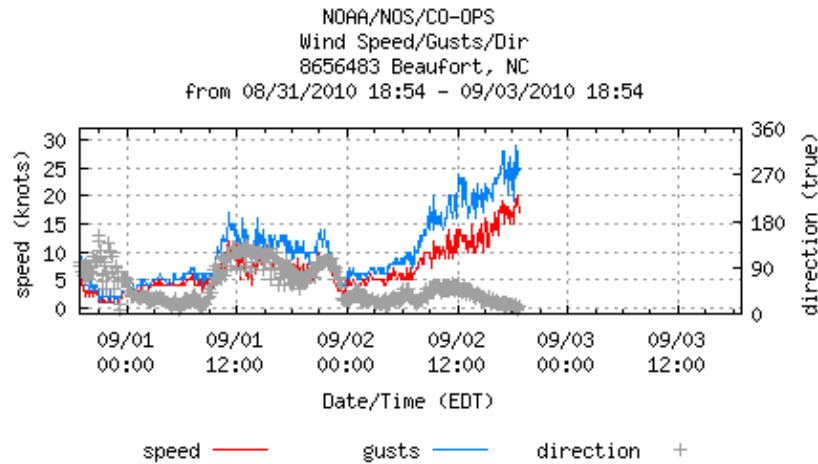


Last Observed Sample: 09/02/2010 18:42 (EDT)

Relative to **MLLW**: Observed: 2.66 ft. Predicted: 1.83 ft. Residual: 0.83 ft.

Historical Maximum Water Level: Sep 16 1999, 2.74 ft. above **MHHW**

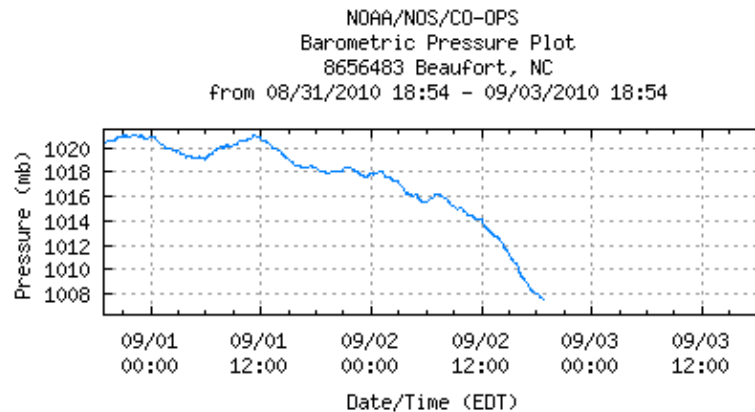
Beaufort, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Wind Speed: 17 knots Gusts: 25 knots Direction: 015° T

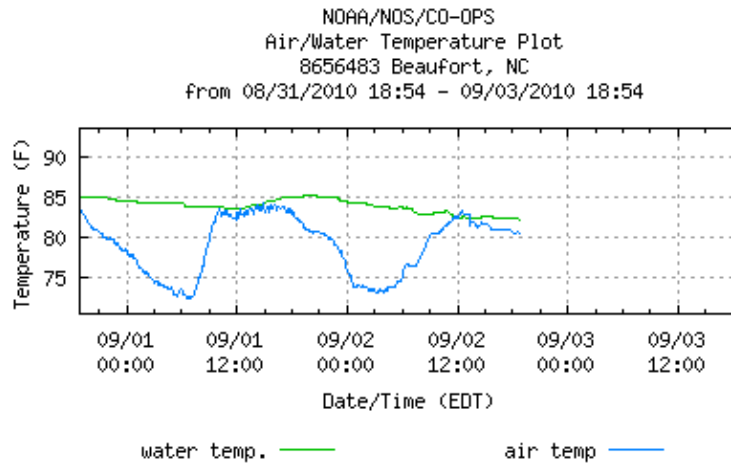
Beaufort, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Barometric Pressure: 1007.6 mb

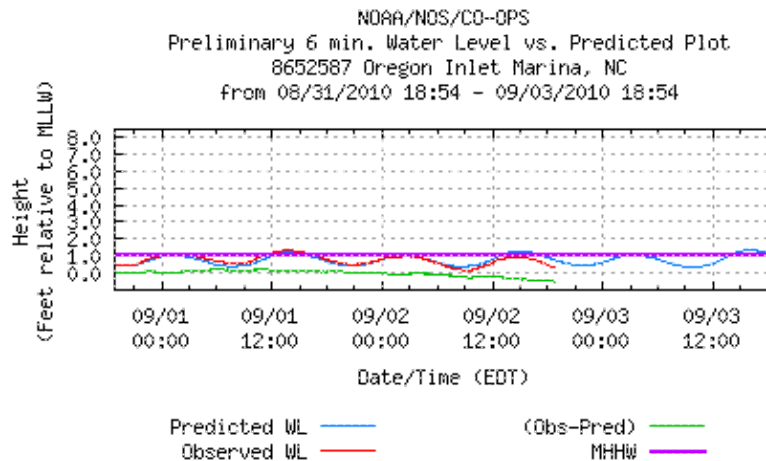
Beaufort, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Water Temperature: 82.2° F Air Temperature: 80.6° F

Oregon Inlet Marina, NC - [Return to List](#)

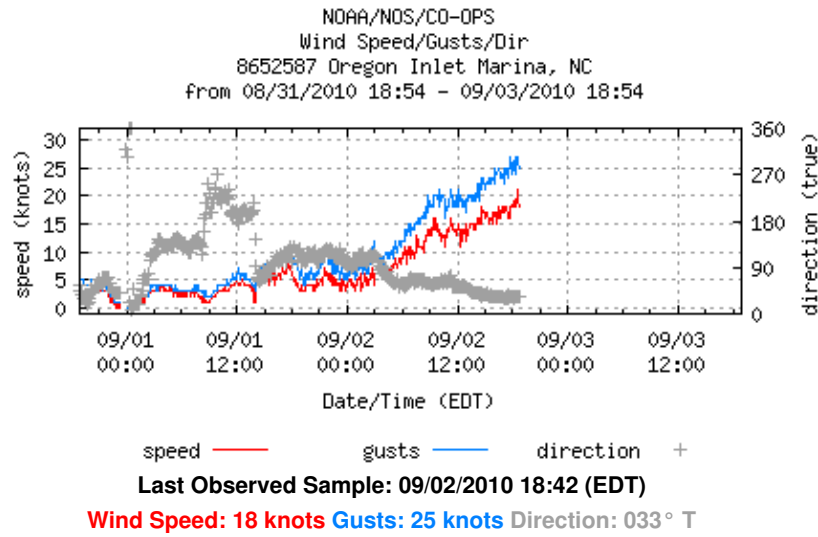


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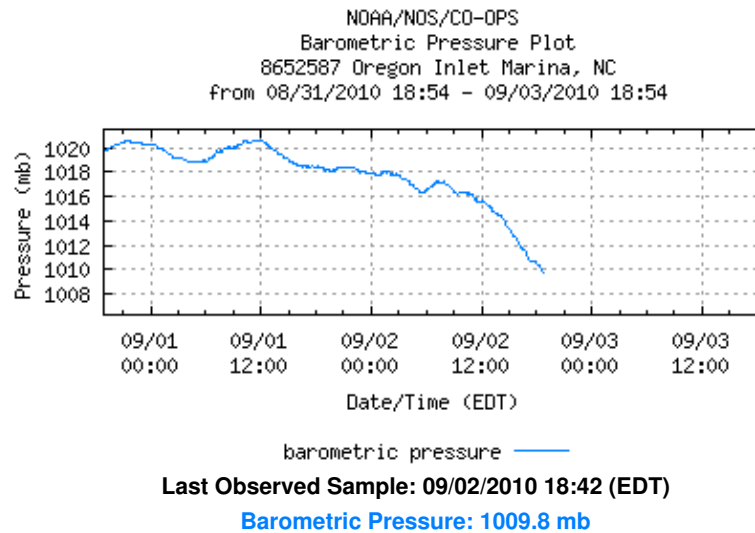
Relative to **MLLW**: Observed: 0.31 ft. Predicted: 0.79 ft. Residual: -0.48 ft.

Historical Maximum Water Level: Sep 16 1999, 4.49 ft. above **MHHW**

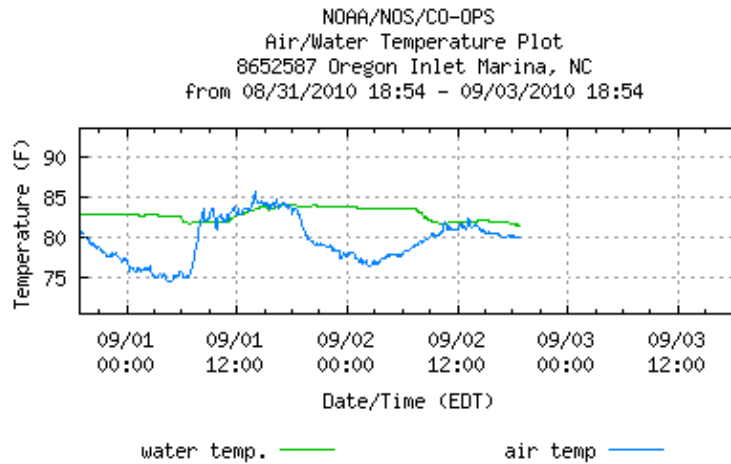
Oregon Inlet Marina, NC - [Return to List](#)



Oregon Inlet Marina, NC - [Return to List](#)



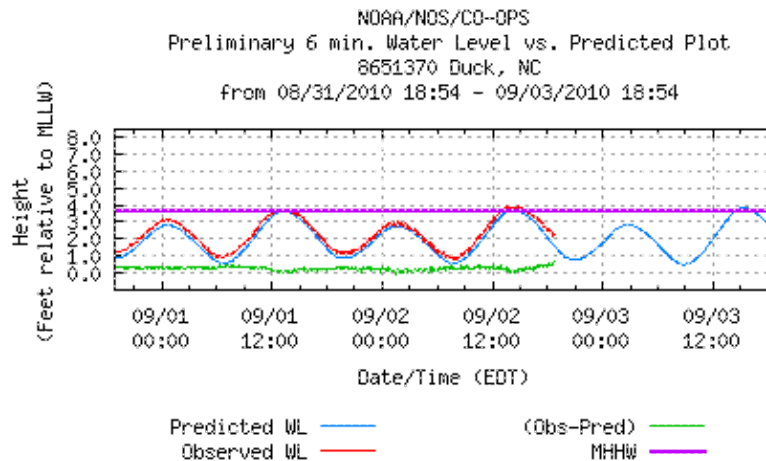
Oregon Inlet Marina, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Water Temperature: 81.5° F Air Temperature: 80.1° F

Duck, NC - [Return to List](#)

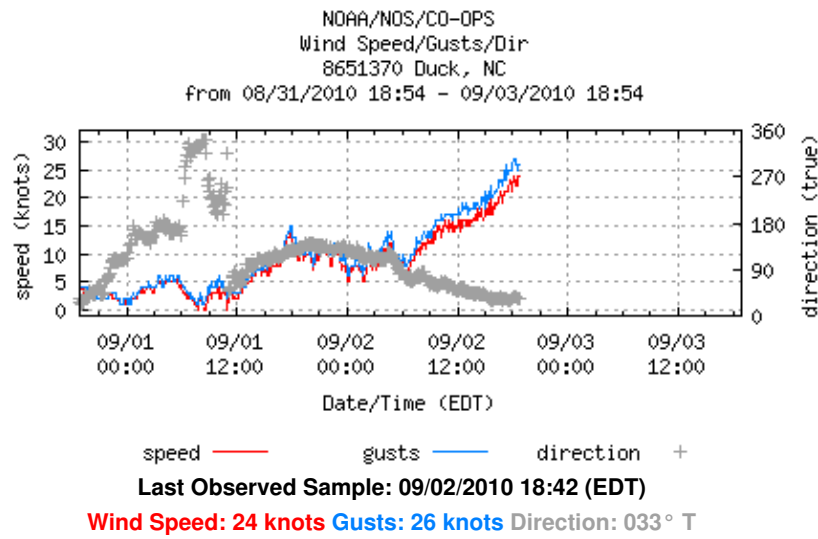


Last Observed Sample: 09/02/2010 18:42 (EDT)

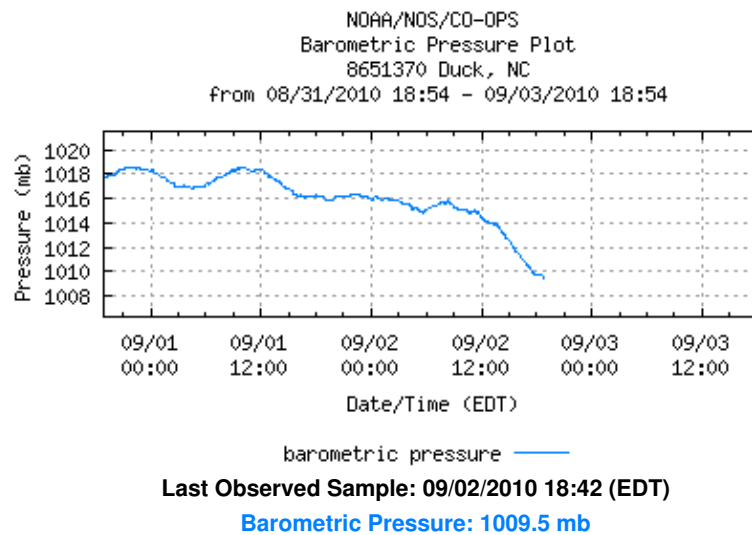
Relative to **MLLW**: Observed: 2.31 ft. Predicted: 1.62 ft. Residual: 0.69 ft.

Historical Maximum Water Level: Aug 30 1999, 3.23 ft. above **MHHW**

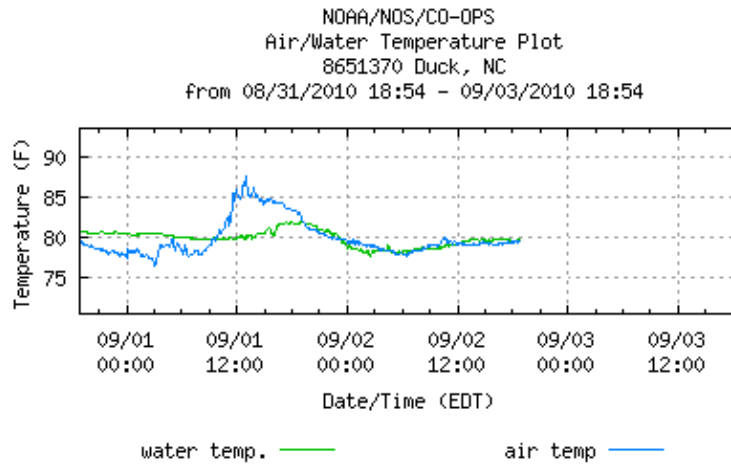
Duck, NC - [Return to List](#)



Duck, NC - [Return to List](#)



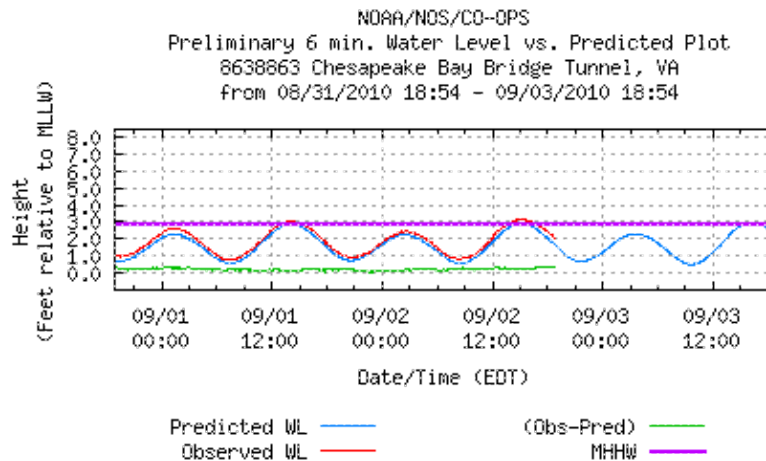
Duck, NC - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Water Temperature: 79.7° F Air Temperature: 79.5° F

Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)

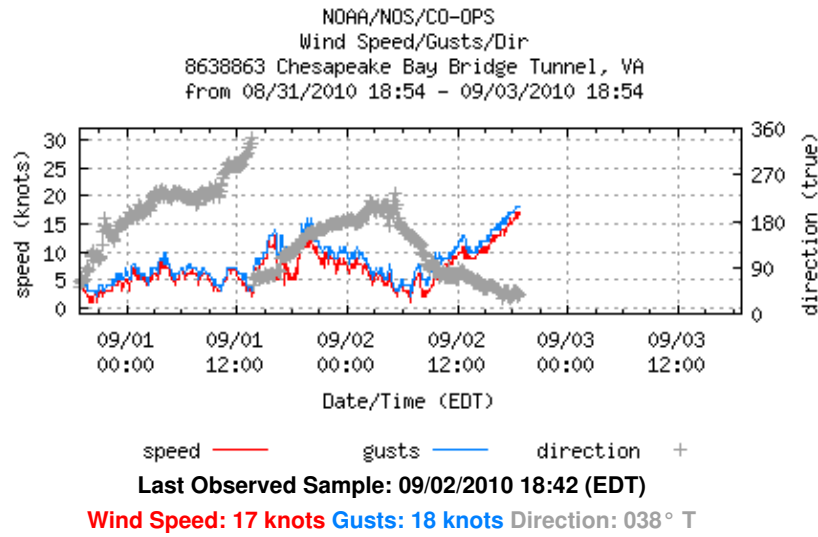


Last Observed Sample: 09/02/2010 18:42 (EDT)

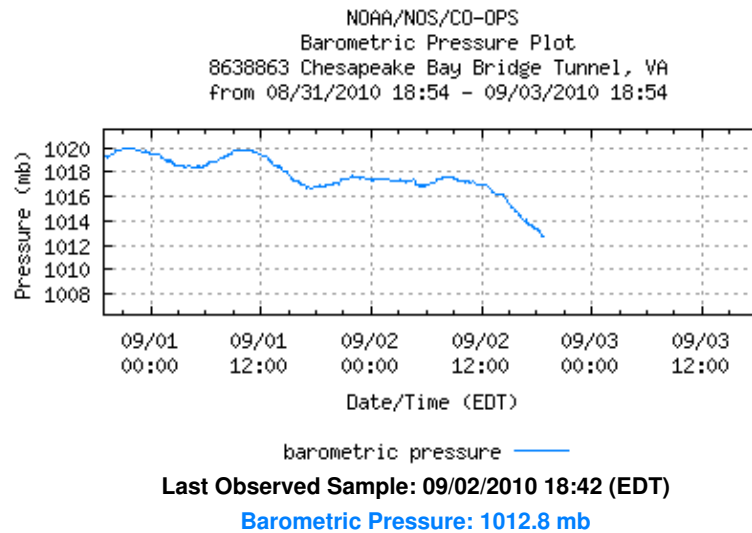
Relative to **MLLW**: Observed: 2.10 ft. Predicted: 1.72 ft. Residual: 0.38 ft.

Historical Maximum Water Level: Feb 5 1998, 3.68 ft. above **MHHW**

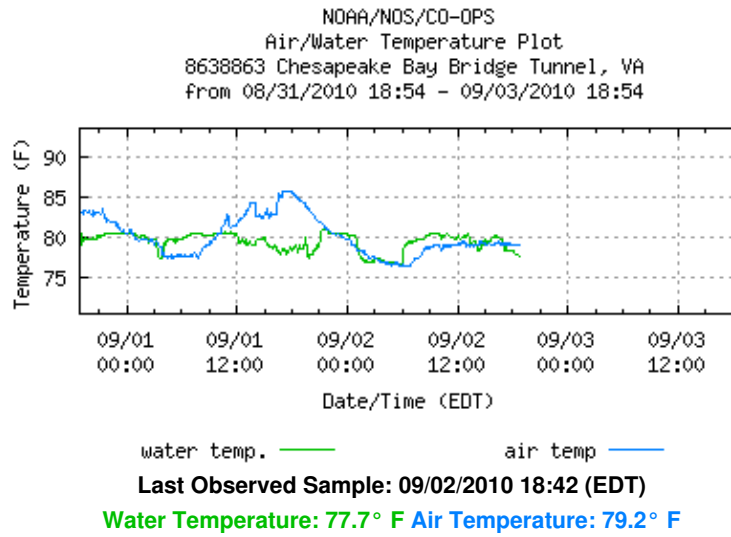
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



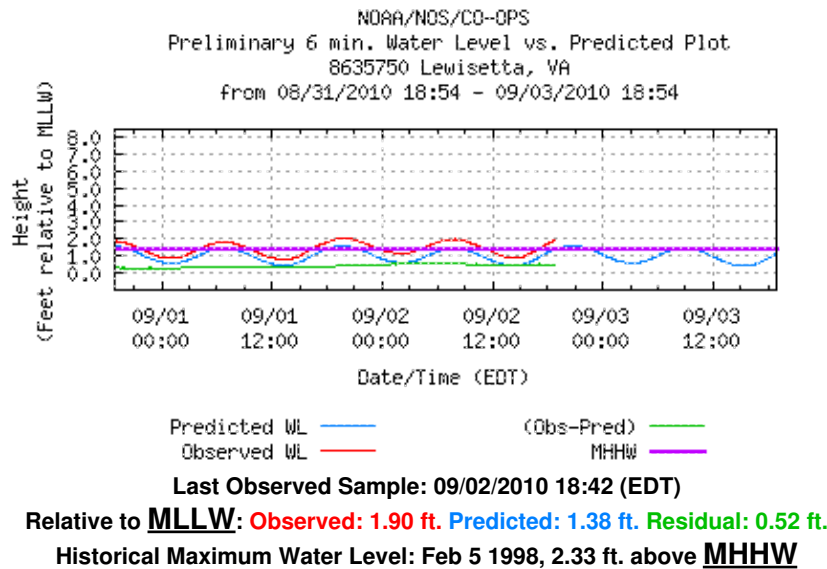
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



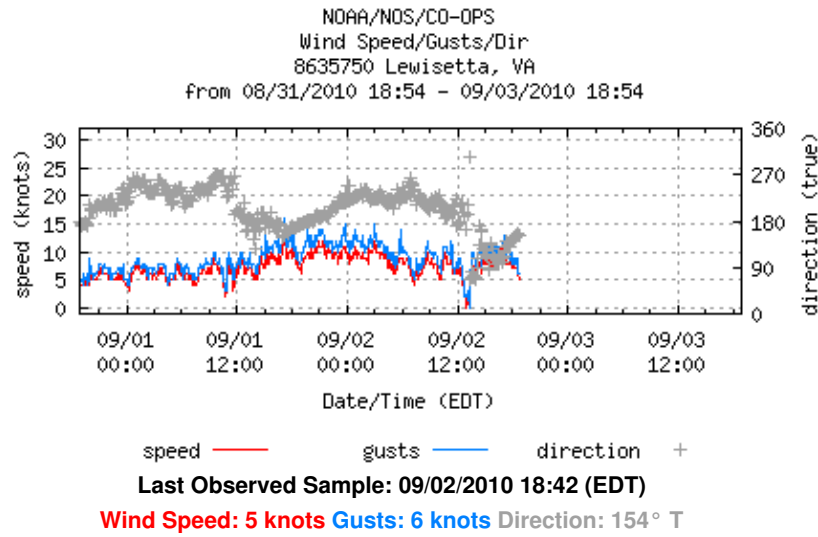
Chesapeake Bay Bridge Tunnel, VA - [Return to List](#)



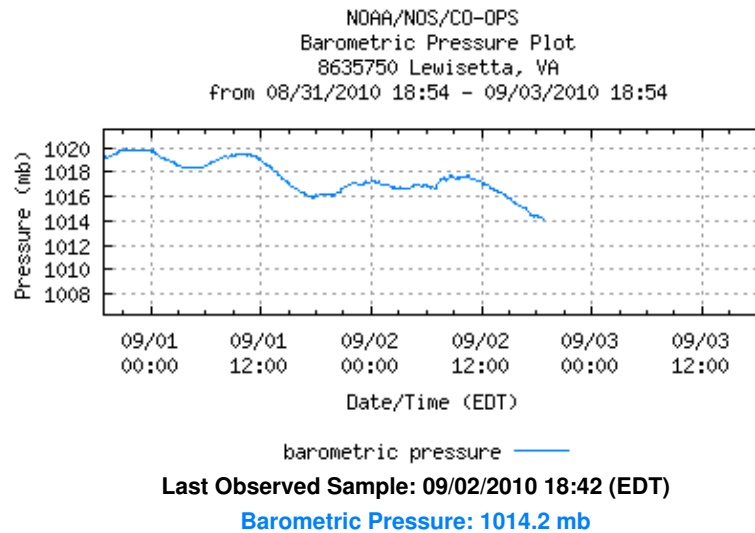
Lewisetta, VA - [Return to List](#)



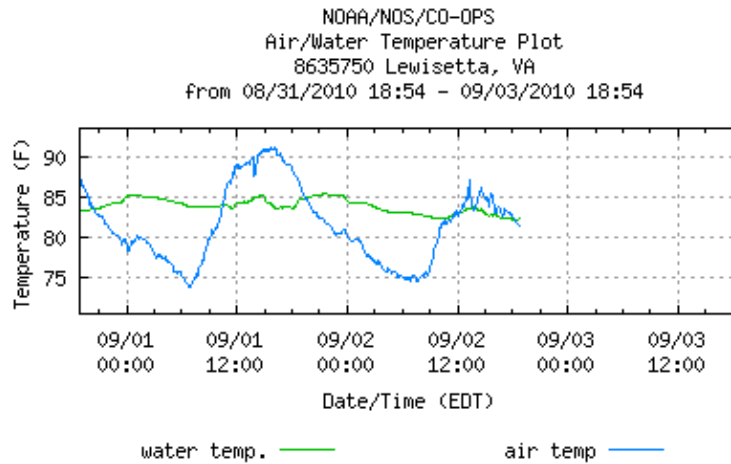
Lewisetta, VA - [Return to List](#)



Lewisetta, VA - [Return to List](#)



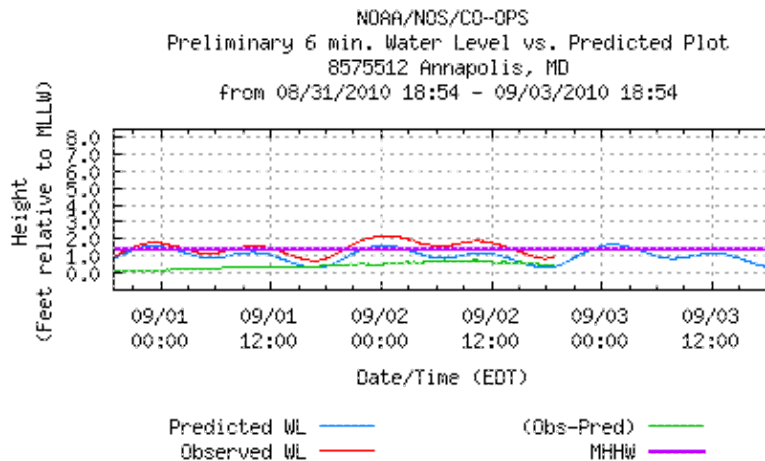
Lewisetta, VA - [Return to List](#)



Last Observed Sample: 09/02/2010 18:42 (EDT)

Water Temperature: 82.3° F Air Temperature: 81.5° F

Annapolis, MD - [Return to List](#)

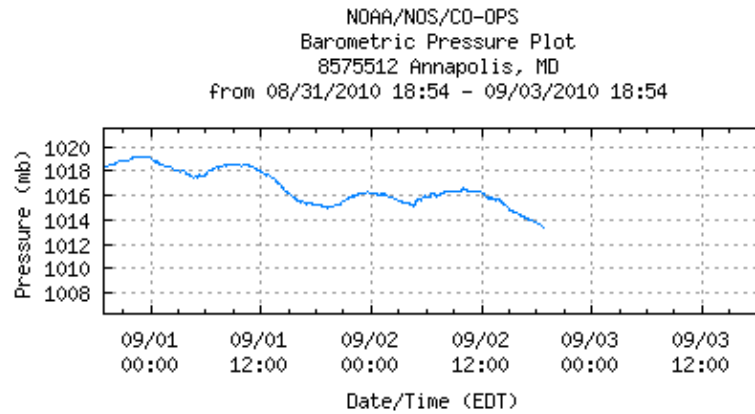


Last Observed Sample: 09/02/2010 18:48 (EDT)

Relative to **MLLW**: Observed: 0.90 ft. Predicted: 0.39 ft. Residual: 0.51 ft.

Historical Maximum Water Level: Aug 23 1933, 4.74 ft. above **MHHW**

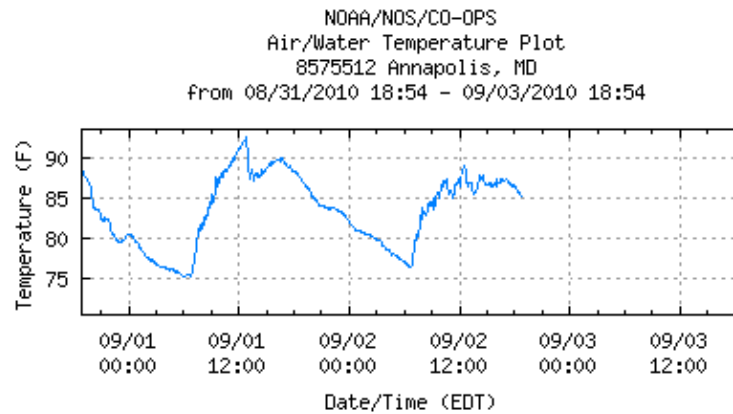
Annapolis, MD - [Return to List](#)



Last Observed Sample: 09/02/2010 18:48 (EDT)

Barometric Pressure: 1013.2 mb

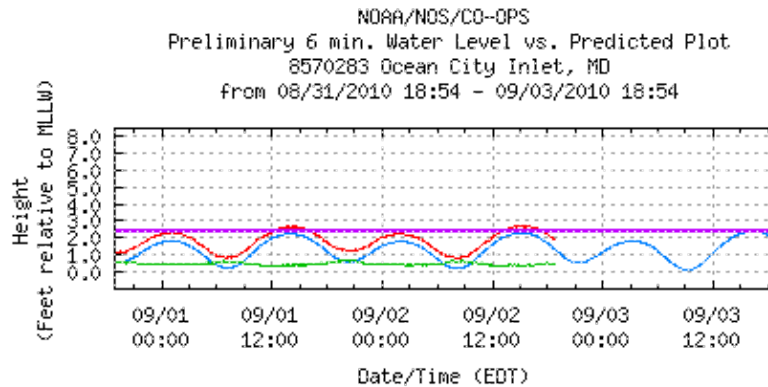
Annapolis, MD - [Return to List](#)



Last Observed Sample: 09/02/2010 18:48 (EDT)

Water Temperature: n/a Air Temperature: 85.1 ° F

Ocean City Inlet, MD - [Return to List](#)



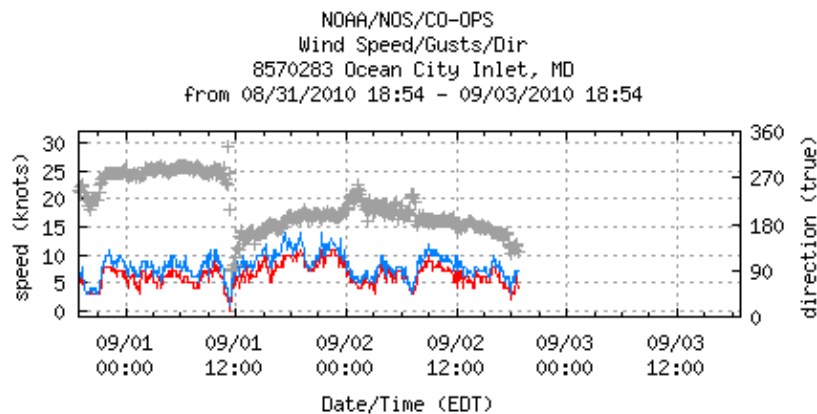
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 09/02/2010 18:42 (EDT)

Relative to **MLLW**: **Observed: 1.90 ft. Predicted: 1.38 ft. Residual: 0.52 ft.**

Historical Maximum Water Level: Feb 5 1998, 3.6 ft. above **MHHW**

Ocean City Inlet, MD - [Return to List](#)

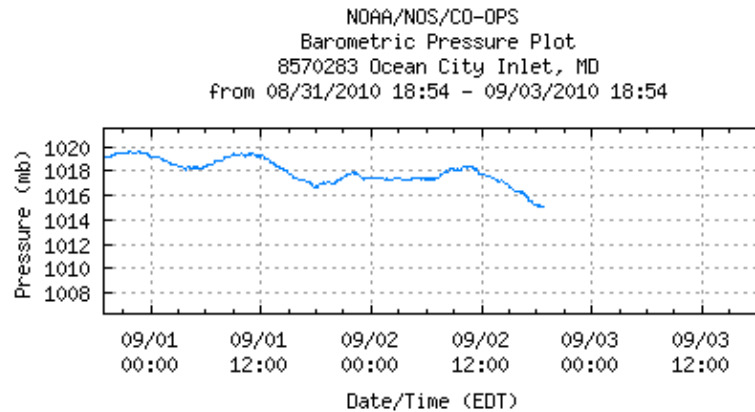


speed — gusts — direction +

Last Observed Sample: 09/02/2010 18:42 (EDT)

Wind Speed: 4 knots Gusts: 7 knots Direction: 127° T

Ocean City Inlet, MD - [Return to List](#)

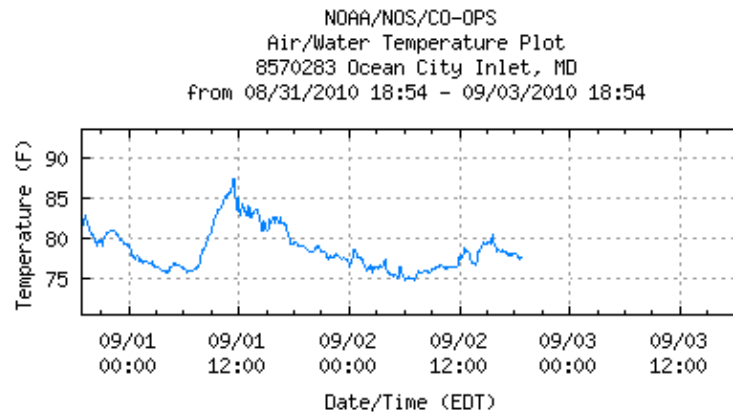


barometric pressure —

Last Observed Sample: 09/02/2010 18:42 (EDT)

Barometric Pressure: 1015.0 mb

Ocean City Inlet, MD - [Return to List](#)



water temp. — air temp —

Last Observed Sample: 09/02/2010 18:42 (EDT)

Water Temperature: n/a Air Temperature: 77.7° F

Hurricane EARL QuickLook, POSTED 18:30 EDT 09/02/2010

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce